## Appendix 1 (PB-1)

## **Explanation of 2-Part CRA Adjustment for First-Class Mail Presort and Standard Mail Regular Presort Letters**

This explanation closely follows Appendix 1 (PB-1) of PB's RM2010-13 Comments (filed on February 18, 2011), RM2010-13 Reply Comments (filed on April 4, 2011), RM2009-3 Initial Comments (filed on May 26, 2009), RM2009-1 Reply Comments (filed on December 10, 2008), and ACR2008 Comments (filed on January 30, 2009).

The proportional Cost and Revenue Analysis (CRA) adjustment is performed by comparing the CRA letter-sorting costs (and other costs that vary with sorting costs) to the weighted-average modeled piece-sorting costs and then applying the resulting proportional adjustment to the modeled piece-sorting costs by presort level. The 2-part CRA adjustment for First-Class Mail presort and Standard Mail Regular presort letters is based on the same comparison, except that for letter-sorting costs the comparison is generally performed separately for Non-Incoming Secondary (Non-IS) and Incoming Secondary (IS) sorting costs. The methodology used to perform the 2-part CRA adjustment is summarized below. The workpapers used to implement the 2-part CRA adjustment can be found in the supporting appendices PB-2 and PB-3.

- PB-2 contains a modified version of the Docket No. ACR2011 First-Class Mail presort letter cost model.
- PB-3 contains a modified version of the Docket No. ACR2011 USPS Standard Mail Regular presort letter cost model.<sup>1</sup>

To divide the CRA letter-sorting costs into IS and non-IS costs, In-Office Cost System (IOCS) data were used to obtain the distribution of MODS codes for the eight letter-sorting cost pools: MODS D/BCS, MODS MANL, MODS LD41, MODS LD42, MODS LD43, MODS LD44, NMOD AUTO/MEC, and NMOD MANL.<sup>2</sup> The analyses used the IOCS data and programs from Docket No. ACR2011.<sup>3</sup> The USPS SAS programs were used through MOD1DIR for MODS and NONMOD1 for Non-MODS, which generate files of direct tallies for MODS and Non-MODS, respectively. Separate SAS programs (which can be found in PB-2 and PB-3) were written for each of the cost pools to analyze the tallies.<sup>4</sup>

<sup>&</sup>lt;sup>1</sup> Specifically, PB-2 is a modified version of USPS-FY11-10, USPS-FY11-10 FCM\_LTRS.xls and PB-3 is a modified version of USPS-FY11-10, USPS-FY11-10 STD\_LTRS.xls. The appendices also include the SAS programs used to analyze IOCS data and the corresponding output files.

<sup>&</sup>lt;sup>2</sup> Consistent with the cost models, costs in the NMOD D.PO Box cost pool are treated entirely as incoming secondary.

<sup>&</sup>lt;sup>3</sup> The ACR2011 IOCS data were filed in USPS-FY11-37 and the SAS programs were filed in USPS-FY11-7.

<sup>&</sup>lt;sup>4</sup> There were 5,686 First-Class Mail Presort Letter and 5,950 Standard Mail Regular letter direct tallies in the letter-sorting cost pools.

The MODS codes in the IOCS data were grouped into Non-IS, IS and Other categories.<sup>5</sup> For MODS codes in the Other category, IOCS information on the scheme being run was used to categorize the tally as Non-IS or IS.<sup>6</sup> In the small number of instances where neither the MODS code nor the IOCS questions provided scheme information, the tallies were left in the Other category.<sup>7</sup>

Within each of the letter-sorting cost pools, the CRA costs were distributed to the Non-IS and IS categories according to the proportion of the weighted IOCS tallies in those categories. The proportional costs for the tallies in the Other category – where neither the MODS codes nor the IOCS scheme questions allowed the tally to be classified as either IS or non-IS – were kept as a separate category of costs. The costs in the Other category for the letter-sorting cost pools were added to the proportional CRA costs for the non-letter-sorting cost pools. The result was a breakdown of the CRA costs into the three categories of Non-IS, IS and Other.<sup>8</sup>

To perform the two-part CRA adjustment, the modeled piece-sorting costs also had to be partitioned into IS and non-IS costs. This is straightforward because non-IS and IS costs are explicitly identified in the models. The resulting costs were then aggregated by computing a volume-weighted average across presort levels to obtain the volume-weighted average modeled piece-sorting cost for the two categories.<sup>9</sup>

The two-part CRA adjustment was performed by computing a separate CRA proportional adjustment for the Non-IS and IS categories, where the CRA and modeled piece-sorting costs were compared for each category and the necessary proportional adjustment calculated. In addition, a common CRA proportional adjustment was performed for those CRA letter-sorting costs that fall into the Other category as well as for all non-letter-sorting costs. The CRA adjustment was performed using the volume-weighted modeled costs computed over all sort schemes.

Once the CRA proportional adjustments were calculated (as described above), these adjustments were then applied to calculate the adjusted modeled unit costs by presort level and added to the fixed costs to obtain the total mail processing unit cost by presort level. The results of the two-part CRA adjustment were then incorporated into new summary sheets for the letter cost models, labeled "2Pt CRA – SUMMARY" in the workbooks in appendices PB-2 and PB-3.

<sup>6</sup> IOCS collects relevant scheme information in questions Q18C5 and Q18D2.

<sup>&</sup>lt;sup>5</sup> The groupings appear in the SAS output files in PB-2 and PB-3.

<sup>&</sup>lt;sup>7</sup> Only about 1.2 percent (First-Class Mail) and 0.9 percent (Standard Mail) of CRA costs in the letter-sorting cost pools was classified as "Other."

<sup>&</sup>lt;sup>8</sup> See the calculation performed on worksheet "2Pt CRA – PRESORT LETTERS" in the workbooks in PB-2 and PB-3.

<sup>&</sup>lt;sup>9</sup> The calculation is performed on worksheet "2Pt CRA - PRESORT LETTERS SUM" in the workbooks in PB-2 and PB-3.